

05863910-052301

a one-piece core made of a mixture of compound components comprising:

a polybutadiene rubber having a cis content of 92% or greater;

and,

an inorganic filler having a specific gravity equal to or greater than about 5.6 wherein said inorganic filler is selected from the group consisting of tungsten, bismuth, copper bismuth oxide, nickel, cobalt, iron, steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, and mixtures thereof; and,

a cover layer wherein at least one said cover layer is disposed upon said core.

2. (Amended) The golf ball of claim 1 wherein[ said inorganic filler is selected from the group consisting of tungsten, bismuth, copper bismuth oxide, nickel, cobalt, iron, steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and mixtures thereof ] said core produced with said heavy weight filler results in a lower PGA compression of said core relative to a core made with a lower specific gravity filler while still maintaining a higher coefficient of restitution wherein said lower specific gravity filler is zirconium dioxide with a specific gravity of approximately 5.50 having a PGA of 89.3 and a coefficient of restitution of .697.

3. (Amended) A three-piece wound golf ball comprising:

a one-piece center made of a mixture of compound components comprising:

a polybutadiene rubber having a cis content of 92% or greater; and,

[an inorganic] a heavy weight filler having a specific gravity equal to or greater than about [5.4] 5.6, wherein said heavy weight filler is selected from the group consisting of tungsten, bismuth, copper bismuth oxide, nickel, cobalt, iron, steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, and mixtures thereof;

a thread winding layer disposed upon said core wherein said thread layer comprises [polybutadiene] rubber; and,

a cover layer disposed upon said thread winding layer.

4. (Amended) The [A] golf ball of [according to] claim 3 wherein said [inorganic filler is selected from the group consisting of tungsten, bismuth, copper bismuth oxide, nickel, cobalt, iron, steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide ferrous oxide, and mixtures thereof ] center produced with said heavy weight filler results in a lower PGA compression of said center relative to a center made with a lower specific gravity filler while still maintaining a higher coefficient of restitution wherein said lower specific gravity filler is zirconium dioxide with a specific gravity of approximately 5.50 having a PGA of 89.3 and a coefficient of restitution of .697.

5. (New) The golf ball of claim 1 wherein said core produced with said heavy weight filler results in a lower volume occupied by said heavy weight filler resulting

in a lower PGA compression relative to a core made with a lower specific gravity filler while still maintaining a higher coefficient of restitution wherein said lower specific gravity filler is zirconium dioxide with a specific gravity of approximately 5.50 having a PGA of 89.3 and a coefficient of restitution of .697 and a volume of 1.95%.

6. (New) The golf ball of claim 1 wherein by illustration said heavy weight filler selected is tungsten with a specific gravity of 19.3 is used in said core, said heavy weight filler has a volume of about 0.48% of said core, and by way of comparative illustration when a filler having a relatively low specific gravity filler used is zirconium dioxide having a specific gravity of 5.50 is used it has a volume of 1.95%, wherein use of said relatively low specific gravity filler results in increased use of amounts of said filler to meet desired weight range for said core and results in reduction of other compound components.

7. (New) The golf ball of claim 3 wherein by illustration said heavy weight filler selected is tungsten with a specific gravity of 19.3 is used in said center, said heavy weight filler has a volume of about 0.48% of said center, and by way of comparative illustration when a filler having a relatively low specific gravity filler used is zirconium dioxide having a specific gravity of 5.50 is used it has a volume of 1.95%, wherein use of said relatively low specific gravity filler results in increased use of

amounts of said filler to meet desired weight range for said center and results in reduction of other compound components.

8. (New) The golf ball of claim 3 wherein said center produced with said heavy weight filler results in a lower volume occupied by said heavy weight filler resulting in a lower PGA compression relative to a center made with a lower specific gravity filler while still maintaining a higher coefficient of restitution wherein said lower specific gravity filler is zirconium dioxide with a specific gravity of approximately 5.50 having a PGA of 89.3 and a coefficient of restitution of .697 and a volume of 1.95%.
9. (New) The golf ball of claim 1 wherein said inorganic filler is tungsten.
10. (New) The golf ball of claim 3 wherein said inorganic filler is tungsten.
11. (New) The golf ball of claim 3 wherein said one-piece core further comprises a vulcanizing agent.
12. (New) A golf ball solid core comprising:  
  
a compound wherein said compound comprises polybutadiene rubber having a cis content of 92% or greater; and,



comparative illustration when a filler having a relatively low specific gravity filler used is zirconium dioxide having a specific gravity of 5.50 is used it has a volume of 1.95%, wherein use of said relatively low specific gravity filler results in increased use of amounts of said filler to meet desired weight range for said core and results in reduction of other compound components with increased PGA.

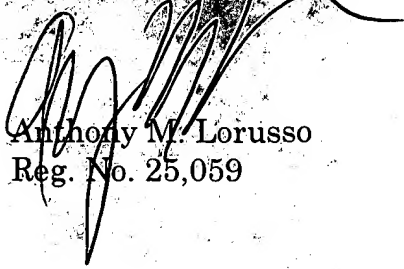
17. (New) The golf ball solid core of claim 12 wherein said core produced with said heavy weight filler results in a lower volume occupied by said heavy weight filler resulting in a lower PGA compression relative to a core made with a lower specific gravity filler while still maintaining a higher coefficient of restitution wherein said lower specific gravity filler is zirconium dioxide with a specific gravity of approximately 5.50 having a PGA of 89.3 and a coefficient of restitution of .697 and a volume of 1.95%.

18. (New) The golf ball of claim 2 wherein said core further comprises core regrind.

### III. Conclusion

The applicant contends that all claims are supported by specification and the instant claimed invention is not taught by any known art. For the foregoing reasons, Applicants believe this application is in condition for allowance, which is respectfully requested.

Respectfully submitted,

  
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Date: May 23, 2001

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